

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 December 2004 (09.12.2004)

PCT

(10) International Publication Number
WO 2004/107088 A3

(51) International Patent Classification⁷: **H04L 12/26**,
12/46, 29/06

(21) International Application Number:
PCT/KR2004/001147

(22) International Filing Date: 14 May 2004 (14.05.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2003-0034962 30 May 2003 (30.05.2003) KR
10-2004-0022184 31 March 2004 (31.03.2004) KR

(71) Applicant (for all designated States except US): **LG ELECTRONICS, INC.** [KR/KR]; 20, Yoido-Dong, Yongdungpo-Ku, Seoul 150-010 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HA, Sam-Chul** [KR/KR]; Sapa-Dongsung Apt. 102-1201, Sapa-Dong, Changwon-Shi, Kyungsangnam-Do 641-550 (KR). **BAEK, Seung-Myun** [KR/KR]; Lucky Apt. 12-403,

Banlim-Dong, Changwon-Shi, Kyungsangnam-Do 641-764 (KR). **LEE, Koon-Seok** [KR/KR]; Sungwon Apt. 102-1406, 45-1 Sangnam-Dong, Changwon-Shi, Kyungsangnam-Do 641-778 (KR). **KIM, Yong-Tae** [KR/KR]; Daedong Apt. 1006-1504, Mukea-Ri, Jangyou-Myun, Gimhae-Shi, Kyungsangnam-Do 621-833 (KR).

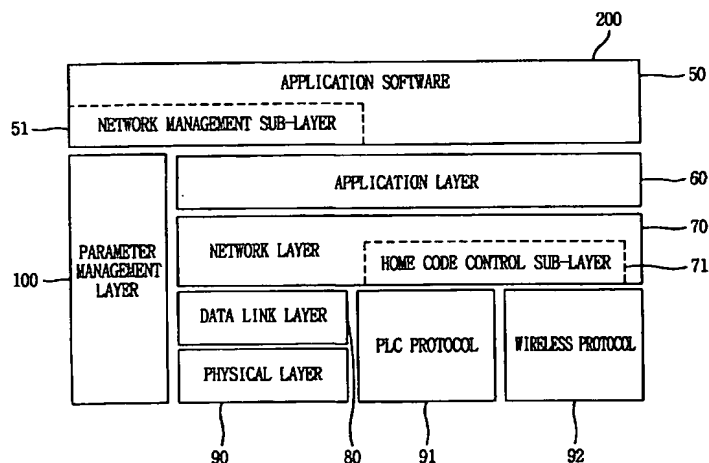
(74) Agent: **LEE, Kwang-Yeon**; **LEE & KIM**, 5th Floor, New-Seoul Bldg., 828-8, Yoksam 1-Dong, Kangnam-Ku, Seoul 135-935 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: HOME NETWORK SYSTEM



(57) Abstract: The present invention discloses a home network system using a living network control protocol. The home network system includes: a network based on a predetermined protocol; at least electric device connected to the network; and a network manager connected to the network, for controlling and/or monitoring the electric device, wherein the protocol includes an application layer (60) for handling a message for controlling and monitoring the electric device, a network layer (70) for network-connecting the electric device to the network manager, a data link layer (80) for accessing a shared transmission medium, and a physical layer (90) for providing a physical interface between the electric device and the network manager, wherein the physical layer (90) further includes a special protocol for providing an interface with a dependent transmission medium, and the network layer (70) further includes a home code control sub-layer (71) for managing a home code for network security when accessing the dependent transmission medium.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:
16 June 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR 2004/001147

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁷: H04L 12/26, 12/46, 29/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷: H04LDocumentation searched other than minimum documentation to the extent that such documents are included in the fields searched
—Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPI, EPODOC, PAJ, Elsevier, IEE, I3E, IEEEXplore

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Koon-Seok Lee, Hoan-Jong Choi, Chang-Ho Kim, Seung-Myun Baek, 'A new control protocol for home appliances-LnCP.' In: International Symposium on Industrial Electronics, 2001. Proceedings. ISIE 2001. 12-16 June 2001 pages: 286 - 291 volume 1	1-49
X	Yi-Min Wang; Russel, W.; Arora, A.; JunXu; Jagannathan, R.K.; 'Towards dependable home networking: an experience report.' In: Proceedings International Conference on Dependable Systems and Networks, 2000. DSN 200025 - 28 June 2000, Los Alamitos, CA, USA, IEEE Computer Society pages: 43 - 48	1-49

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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Date of the actual completion of the international search
24 March 2005 (24.03.2005)Date of mailing of the international search report
13 April 2005 (13.04.2005)Name and mailing address of the ISA/ AT
Austrian Patent Office
Dresdner Straße 87, A-1200 ViennaAuthorized officer
ENGLISCH M.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR 2004/001147

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